United States Department of Agriculture **Forest Service** **White Mountain National Forest Ammonoosuc/Pemigewasset Ranger District** **1171 NH Route 175 Holderness, NH 03245-5031 Comm: (603) 536-1315 TTY: (603) 536-3281**

File Code: 1950/2520/2630
Date: July 21, 2005

Dear Interested Citizen:

Introduction

The Ammonoosuc-Pemigewasset Ranger District of the White Mountain National Forest (WMNF) is proposing a stream restoration project in the Mill Brook watershed, located in the Towns of Carroll, Jefferson, Low and Burbanks Grant, NH (see Map Figure 1). We are informing you of this proposal and inviting you to send your comments to us for consideration. As you review this scoping letter, you may have information about the proposed project that you believe may be important for us to consider in arriving at a decision. You will find details on how to submit comments to us at the end of this letter.

Background Information

Historical land use practices have affected watershed conditions and aquatic habitat diversity in many of the streams on the WMNF. Research shows many rivers and streams were altered from turn-of-the-century logging practices. In New England, wood was removed from streams, boulders were blasted for log drives, riparian forests were cleared, and various farming practices occurred in these cleared areas. Today, many of these logged and farmed areas have reverted to a second growth riparian forest.

Current Condition of the Mill Brook Watershed

The Forest Service conducted habitat and fish inventories in Mill Brook and its tributaries during 2003 and 2004. The entire watershed to the confluence with the Israel River drains approximately 10,231 acres in the towns of Carroll, Jefferson, and Low and Burbanks Grant. Much of the lower portion of this watershed is in private ownership. Mill Brook upstream of the confluence with Appleby Brook drains approximately 4,290 acres of entirely National Forest land. The majority (approximately 47%) of upland forest present today in the WMNF portion of the Mill Brook watershed is northern hardwoods. Red spruce comprises 18% of the forest, mostly in the higher elevations. The lowland forest along Mill Brook and its tributaries include hardwood and softwood stands and these valley bottom forests comprise nearly 21% of the watershed. The riparian forest ranges in age from 60 to <120 years old and it will be several decades before a significant amount of wood from dead and dying trees falls into the stream course. Past removal of trees from the Mill Brook riparian area has resulted in a reduction of aquatic habitat diversity.

The fish community throughout the Mill Brook watershed is dominated by slimy sculpin and eastern brook trout, and the lower reaches (off the WMNF) also support blacknose dace and creek chub. The WMNF Land and Resource Management Plan identifies desired habitat standards for coldwater streams and the eastern brook trout. Habitat conditions from Mill Brook are compared to Forest Plan standards:

Forest Plan Stream Habitat Standards (Desired Future Condition)	Mill Brook	East Branch Mill Brook
Water Temperature (<72° F Daily Max)	66.5°F avg max in Reaches D, E, & F	67°F at the confluence
% Pool Area (> 20% total stream area)	< 20% total area with only: 9 quality pools in Reaches D, E, F & 4 quality pools in Reaches B & C.	<20% total stream area.
Instream Cover (>20% total stream area)	< 20% total stream area.	<20% total stream area.

Research shows that large wood material and boulders in streams, when properly placed, have a beneficial effect on the physical and biological processes that result in diverse aquatic habitats. A survey of Wonalancet Brook, an undisturbed stream on the WMNF, documented approximately 281 pieces of large woody debris per mile with more than 46 pieces per mile of the largest size class. The larger pieces of wood tend to be the most stable, the most capable of forming instream habitat, and provided the best cover for fishes (Dolloff 1994). In comparison, only 31 single pieces of large woody debris (6 to 18" diameter) per mile with only 3 woody debris jams of 3 to 7 pieces of wood were counted during a survey of the lower Mill Brook Reaches D, E, and F in 2004. Furthermore, 14 single pieces of large woody debris and 1 debris jam were counted in a ½ mile section in upper Mill Brook Reach C (see Map Figure 1).

Purpose and Need for the Project

The purpose of the Mill Brook Stream Restoration Project is to increase aquatic habitat diversity and improve watershed conditions of Mill Brook and its tributaries for self-sustaining wild brook trout and other aquatic/riparian dependent species. Habitat and fish population data from Mill Brook on the WMNF indicates a shortage of quality pool habitat that appears to be a limiting factor for adult brook trout population numbers. Also, a dirt road leading to the Agnew State Forest in Jefferson, NH continues past the state forest boundary onto the adjacent National Forest land for a short distance and eventually becomes a footpath along Mill Brook. The dirt road is poorly located in the riparian area of Mill Brook leading to two non-designated campsites, one of which is located on National Forest land. The soil is compacted by vehicles parking on the streambanks and the riparian vegetation is impacted by campers. During high flow conditions the water flows down the unclassified road and causes stream bank failure and erosion. These campsites and the unclassified road are not maintained by the Forest Service. The Forest Service considers the portion of dirt road on National Forest land an unclassified road slated for decommissioning, and the non-designated campsite does not meet Forest Plan guidelines.

There is a need to place large trees into Mill Brook and its tributaries to improve mid-summer and winter habitat conditions for fish and other aquatic species. There is also a need to eliminate the short segment of unclassified road and non-designated campsite poorly located on National Forest land, and to stabilize streambanks at a former stream crossing on a Mill Brook tributary.

In summary, the Mill Brook watershed was selected for restoration because of the lack of aquatic habitat diversity, which likely resulted from historic land use practices that removed large trees from the streambanks. The riparian area is a second growth forest with reduced potential for large trees falling into the stream in the near future. Also, the short segment of unclassified road and the non-designated campsite located in the riparian area are not maintained, and the road acts a run off channel during high flows. Other criteria included:

1.) The Mill Brook Stream Restoration Project Area would occur entirely on National Forest land within Forest Plan Management Area 3.1 (LRMP 1986, III-36). Specific goals of MA 3.1 are to provide large volumes of high quality hardwood, increase wildlife habitat diversity, and broaden the range of recreation opportunities (mainly semi-primitive motorized experiences). The Mill Brook Stream Restoration Project would not compromise other MA resource goals.
2.) There is a wild brook trout population present in the watershed and the channel size, water quality, and stream productivity are sufficient to expect positive results.
3.) There is good access to the streams within the watershed for working, monitoring, and for project demonstration purposes.

Proposed Action

To meet the Purpose and Need, the White Mountain National Forest proposes to increase aquatic habitat diversity and restore watershed functions on National Forest land in the Mill Brook watershed starting in the headwaters and continuing downstream to the Agnew State Forest boundary. The proposed work by stream reach shown on the enclosed Map Figure 1 includes:

Reaches A, B, C and E show four sections each approximately ¼ to ½ mile long on Mill Brook and the East Branch Mill Brook where approximately 300 trees total ranging from 4 to 12 inches diameter would be placed in these stream reaches over approximately a three-year time span. Placing trees via handwork would create quality pool habitat with woody cover that would store organic nutrients and collect sediment and spawning gravels. Hand crews using chain saws would fell nearby trees during snow-free periods. Trees would be cut to length and placed in the stream using a grip hoist to achieve maximum effectiveness. Some structures may require grouping of trees due to their smaller diameter size. Trees would be removed singly or in small groups under the supervision of the Forest Service project leader to maintain forest stand integrity and ensure that all Forest Plan Standards are followed. Eroding stream banks where a bridge was removed on the East Branch Mill Brook (Reach A) would be stabilized and instream channel habitat restored using native materials. The existing beaver habitat in the headwater section of Mill Brook (downstream of Reach B) would be maintained using regeneration techniques for alder and aspen.

Reaches D and F show two sections of Mill Brook each approximately ½ mile long where approximately 200 trees total ranging from 6 to 18 inches diameter would be placed in Mill Brook at selected sites that are accessible by an excavator. Placing whole trees with root wads into Mill Brook would create quality pool habitat with woody cover and store organic nutrients and collect sediment and spawning gravels. Smaller diameter trees would be added to create wood cover jams in some areas. A Forest Service interdisciplinary team identified access routes along this section of Mill Brook that would use an existing unclassified road, an abandoned foot trail, and an old logging road that parallels this section of stream (which would minimize any disturbance to the riparian area and stream banks). The District Biologist, Biological Technicians, and District Siviculturist identified several areas near the Mill Brook Stream Restoration Project Area where an excavator could remove entire trees with root wads. Trees would be removed singly or in small groups under the supervision of the Forest Service project leader to maintain forest stand integrity and ensure that all Forest Plan Standards are followed. Several trees with rootwads would be combined in places to maximize instream benefits. Some of the trees may be cabled to existing boulders or trees. A small hillside slump in Reach D would also be stabilized using native materials. This phase of work in

Reaches D and F would be implemented over a one to two year period using a tracked excavator for approximately two weeks each summer during low flow.

In Reach F there is also an opportunity to improve stream habitat and floodplain functions in approximately a ½ mile section of the lower portion of Mill Brook**.** The relatively short section of unclassified road located in the riparian area on National Forest land would be closed out along with the non-designated campsite. Rock barriers would be placed at the Forest Service boundary with the Agnew State Forest preventing motorized vehicle access into the riparian area; however, foot traffic would be permitted. Earthen piles and trees would be placed into the unclassified roadbed to raise its elevation and eliminate it as a water channel. In areas where the abandoned foot trail is close to Mill Brook, placement of wood in the trail corridor would deflect water and prevent new stream channels from developing. High flows would be concentrated into the original Mill Brook channel improving stream habitat, and vehicles would be prevented from parking immediately on the streambank. Both a tracked excavator and hand crews would be used during this phase of work.

Preliminary Analysis

The WMNF has implemented similar restoration projects on Bog Brook in Mason, ME and on Evans Brook in Batchelders Grant, ME. Fish populations have responded positively, as found on many other similar projects on the Green Mountain National Forest in Vermont. The National Forest staff in New England has considerable experience implementing stream restoration projects and their expertise would be used during this project to minimize any effects on water quality. Although turbidity and sedimentation were visible during implementation of similar projects, the effects were short term and offset by long-term improvements in habitat. The potential for hydraulic fluid leaks are addressed in a Hazmat Spill Plan for each project, and a spill kit is available on each site. Working in low flow stream conditions, pre-project equipment inspections, use of experienced staff, and the ability to move quickly out of the stream all minimize any potential effects on water quality. Our initial analysis has revealed no extraordinary circumstances associated with this Proposed Action. Our further analysis would examine any potential effects on soils, water quality, threatened and endangered species, wetlands, municipal watersheds, Wilderness, National Recreation Areas, roadless areas, Research Natural Areas, and cultural resource sites. We also would consider all environmental concerns and suggestions received from the public and input from resource specialists. Additional mitigation measures would be implemented if needed. Detailed project plans would be submitted to New Hampshire Department of Environmental Services for all necessary permits, which would be obtained prior to project implementation.

Decisions to be Made

Based in part on your input, on recommendations of an interdisciplinary team of specialists, and on the requirements of the National Environmental Policy Act of 1969, I will decide:

- Whether to implement this project as proposed, as modified by an alternative, or not at all;
- Whether the project would have potentially significant impacts requiring an Environmental Assessment or Environmental Impact Statement; and
- What monitoring requirements should be applied to this proposed project.

Project Category

The Proposed Action for the Mill Brook Stream Restoration Project fits in the category "modification or maintenance of stream or lake aquatic habitat improvement structures using native materials or normal

practices" and therefore may be categorically excluded from documentation in an Environmental Assessment or Environmental Impact Statement under Forest Service Handbook 1909.15, 31.2 (7). Pursuant to 36 CFR 215, the decision whether or not to implement this project is non appealable, therefore it is important we receive your comments prior to a decision. Copies of the Decision Memo of whether or not to implement this project will be mailed to people who submit comments before or during the comment period and to those who request copies of the Decision Memo.

How You Can Submit Comments

You may submit your comments to the attention of District Biologist Clara Weloth or Biological Technician Anna Johnston via any one of the following means:

Mail = White Mountain National Forest, 660 Trudeau Road, Bethlehem, NH, 03574
FAX = (603) 869-5844
Phone = (603) 869-2626; TTY number (603) 869-3104
e-mail = cweloth@fs.fed.us or amjohnston@fs.fed.us

Comments must be submitted by close of business (4:30 pm EST) on Wednesday August 31, 2005. Please be sure to include the following information:

(1.) Your name, address, telephone number, and organization title if applicable.
(2.) The name of the project: Mill Brook Stream Restoration Project.
(3.) The specific concerns related to the Proposed Action described above.

Please make site-specific comments where possible, and address any details of the Proposed Action as described in this letter. Be sure to provide supporting rationale for your comments, including concerns about potential environmental effects of the proposed project. Please be aware that your name, address, and comments become part of the public record and may be available for public inspection. I realize your time is valuable and I appreciate the time you spend reviewing and commenting on this proposal.

Sincerely,

JOHN J. SERFASS
District Ranger

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enclosures